Materials

* 8 sed trap samples (glass bottles)
* 4 centrifuge tubes
* 4 clean large Erlenmeyer flasks
* 4 ashed EEMs vials (labeled)
* 2 1L graduated cylinders
* 1 scoopula
* DI water
* Acetone
* Kim wipes
* Gloves

Methods

1. The first goal is to pour all of the water out of a sed trap bottle without losing any of the sediment.
   1. Slowly decant water out of the bottle and into the first Erlenmeyer flask. Once the flask is close to full, you can very carefully switch to the next flask. Try to move the bottle as little as possible throughout this whole process and especially when switching flasks (i.e., do not set it down, no sudden movements, etc)
   2. The purpose of having many Erlenmeyer flasks is so that you can save any sediment that you accidentally pour into a flask. The first one should be really easy and look very clear, but if sediment gets stirred up at all it may come out towards the end. If this happens, just keep pouring and switching containers as much as you need.
   3. Eventually, when you get to under 20 mLs (you will have to estimate this), swirl the remaining water to gather all sediment and pour it into a labeled centrifuge vial. If you have any sediment in Erlenmeyer flasks, decant the water off the top of the flask and pour the sediment into the vial. You may need to decant water off the top of the centrifuge vial to make room. This is an art form. Do as much as you can to get all of the sediment, but it may not be absolutely perfect.
   4. Repeat for the second bottle of this rep, adding the additional sediment to the same centrifuge vial
   5. Fill the centrifuge tube all the way full with water from the sample
   6. Cap it, make sure it is labeled with the depth and rep, and place in the centrifuge
   7. Measure the amount of water that you decanted to get the total volume
   8. Filter approximately 300 mL of the remaining water onto a sed trap filter
   9. Repeat these steps for all remaining sed traps
2. The second task is to spin the sample down so that you can remove the remaining water.
   1. Carefully balance the tubes and make sure the centrifuge looks okay
   2. Set it to 30,000 for 30 min
   3. Double check the centrifuge protocol, located on the wall right behind it
   4. Press start, and stick around for a minute to make sure everything looks okay
3. Finally, we want to take the sediment and freeze it for future analysis.
   1. Put on gloves
   2. Decant off the supernatant from each tube.
   3. Wipe the scoopula with acetone
   4. Using the scoopula, carefully get all of the sediment out of the centrifuge tube and into a glass EEMs vial. You can use a small amount of water to do this if necessary.
   5. Make sure the EEMs vial is labeled with the site, depth, rep, and date.
   6. Repeat for all samples
   7. Place in the freezer in Middle Earth, in the box labeled centrifuged sed trap samples

Thank you!!!